

# ABSTRACT

A photodetecting unit 5 comprises a photosensitive region 10, a first signal processing circuit 20, and a second signal processing circuit 30. In photosensitive region 10, pixels  $11_{mn}$  are arrayed two-dimensionally in M rows and N columns. One pixel is arranged by adjacently positioning in the same plane a photosensitive portion  $12_{mn}$  and a photosensitive portion  $13_{mn}$ , each outputting a current that is in accordance with the intensity of light that is made incident thereon. Across each of the pluralities of pixels  $11_{11}$  to  $11_{1N}$ ,  $\cdot \cdot \cdot$ ,  $11_{M1}$  to  $11_{MN}$ , aligned in a first direction in the two-dimensional array, one photosensitive portion  $12_{mn}$  of each corresponding pixel is electrically connected to the same photosensitive portion  $12_{mn}$  of each of the other corresponding pixels. Also across each of the pluralities of pixels  $11_{11}$  to  $11_{M1}$ ,  $\cdot \cdot \cdot$ ,  $11_{1N}$  to  $11_{MN}$ , aligned in a second direction in the two-dimensional array, the other photosensitive portion  $13_{mn}$  of each corresponding pixel is connected to the same photosensitive portion  $13_{mn}$  of each of the other corresponding pixels.